

ABSTRACT

A multi-layer process for producing structural cementitious panels, includes, (a.) providing a moving web; (b.) one of depositing a first layer of loose fibers upon the web and (c.) depositing a layer of settable slurry upon the web; (d.) depositing a second layer of loose fibers upon the slurry; (e.) embedding said second layer of fibers into the slurry; and (f.) repeating steps (c.) through (e.) until the desired number of layers of settable fiber-enhanced slurry in the panel is obtained. Also provided are a structural panel produced by the present process, an apparatus suitable for producing structural cementitious panels according to the present process, and a structural cementitious panel having multiple layers, each layer created by depositing a layer of settable slurry upon a moving web, depositing fibers upon the slurry and embedding the fibers into the slurry such that each layer is integrally formed with the adjacent layers.